



November 28, 2018

Marlene H. Dortch, Secretary  
Federal Communications Commission  
445 12<sup>th</sup> St SW  
Washington, DC 20445

Re: *Connect America Fund, Developing a Unified Intercarrier Compensation Regime*, WC  
Docket No. 10-90 & CC Docket No. 01-92

Dear Ms. Dortch:

CenturyLink submits this ex parte in support of its petition for a declaratory ruling that “over the top” VoIP providers and their LEC partners perform the functional equivalent of end office switching and, accordingly, may collect end office local switching access reciprocal compensation under the Commission’s rules.<sup>1</sup>

AT&T’s proposed reading of the VoIP Symmetry Rule would draw an arbitrary and capricious line between forms of VoIP that are compensable and forms of VoIP that are not compensable. Throughout the record on this issue—a record that stretches back to 2011—AT&T has consistently failed to provide a legally defensible rationale for why it believes some LECs cannot assess end office switching charges in some call scenarios even while AT&T itself assesses end office switching charges for *every* call it connects to the PSTN. They also ignore the fact that this traffic is fundamentally indistinguishable from traffic that LECs have always carried and that has always been compensable.

AT&T’s failure to explain which call scenarios permit a LEC to assess end office switching charges and which do not—and why that would be so—is not a simple oversight. It would be impossible for AT&T to do so.

To illustrate this problem, consider a paradigmatic example of modern enterprise communications services—a unified communications and collaboration solution like Microsoft’s Skype for Business. CenturyLink sells services that enable PSTN connectivity for Skype for

---

<sup>1</sup> Petition of CenturyLink for a Declaratory Ruling, WC Docket No. 10-90, CC Docket No. 01-92 (filed May 11, 2018).

Business deployments, as do AT&T<sup>2</sup> and Verizon.<sup>3</sup> These solutions enable voice-service-anywhere, utilizing LEC switching facilities, whether or not the caller or called person is directly connected to other facilities owned by the LEC. While these kinds of services rely on modern IP networks, they are essentially identical to legacy arrangements in which an incumbent LEC provided an old-fashioned TDM PRI to an enterprise PBX where the PBX served callers are not physically located in the same building as the PBX (or potentially even in the same state). In such arrangements, the enterprise itself was the end user, and the LEC assessed access charges based on the transmission of the call to or from the enterprise's PBX, regardless of how the enterprise's internal network was set up or where the caller or called person might sit.<sup>4</sup>

Typically with Skype for Business, the caller—that is, the enterprise customer's employee—has a VoIP phone that is connected to her employer's network; when Skype for Business is open and she is logged in, the application registers with the application server in Microsoft's cloud network. Among other features, Skype updates the server if the employee is away, busy, on the phone, or goes offline, and it can allow other employees to see one another's status. Microsoft has a direct connection to its partner LECs, and the LEC provides connectivity to the PSTN.

---

<sup>2</sup> See *Enable Collaboration Across Businesses, Locations and Devices*, AT&T Business, <https://www.business.att.com/content/productbrochures/conferencing-mslync-product-brief.pdf> (last visited Sept. 17, 2018); see also Reply Comments of CenturyLink in Support of Its Petition for a Declaratory Ruling at Exhibit B, WC Docket No. 10-90, CC Docket No. 01-92 (filed July 3, 2018) (“CenturyLink Reply Comments”).

<sup>3</sup> See *Work Happens Everywhere. Make it Easier With Microsoft Office 365*, Verizon, [http://www.verizonenterprise.com/resources/office-365-solutionsbrief\\_en\\_xg.pdf](http://www.verizonenterprise.com/resources/office-365-solutionsbrief_en_xg.pdf) (last visited Sept. 17, 2018); see also CenturyLink Reply Comments at Exhibit G.

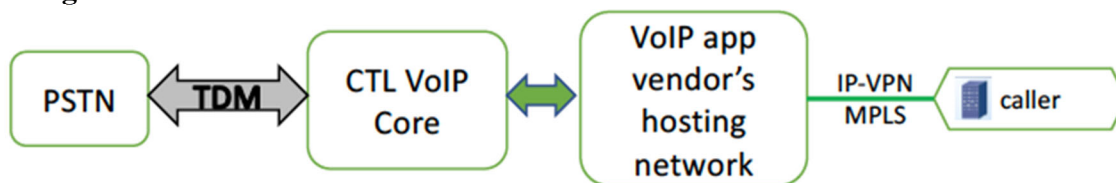
<sup>4</sup> Arrangements in which a PBX served as a gateway to a multi-location enterprise's internal network were such a significant feature of the legacy TDM environment that more than thirty years ago, the Commission established rules to address a related consequence of such arrangements, the so-called “leaky PBX” phenomenon. See, e.g., *MTS/WATS Market Structure*, Memorandum Opinion and Order, 97 FCC 2d 834, 868–876 ¶¶ 108–133 (1984) (subsequent history omitted). That phenomenon involved a multi-location enterprise carrying calls from one location to another (in another exchange area) on the enterprise's own network and then “leaking” the call into the second location's local exchange from its PBX via local telephone lines, which enabled the enterprise to avoid paying long-distance charges for that call. This proceeding does not involve “leaky PBXs.” However, the enterprise PBX is treated consistently: from the LEC's perspective, the service it provided to an interconnected IXC was transmission to or from the enterprise itself, and the LEC handed calls off to or picked calls up from the enterprise via its connection to the PBX. Where the actual caller or called individual might sit, whether at the same physical location with the PBX or at a remote site, however connected to the PBX, was irrelevant to how the LEC would handle calls to or from the PBX, or how the LEC might assess access charges to interexchange carriers delivering traffic to or receiving traffic from that PBX via the LEC.

That employee might be connected to the Skype for Business application server in a variety of different ways, including, among others, the following:

- She might be in her employer's main office, which connects via an IP-VPN provided by CenturyLink over its own fiber.
- She might be in a branch office, connected to the VPN via a third-party Ethernet Virtual Private Line resold by CenturyLink, with a failover connection to a third-party Internet connection, also resold by CenturyLink.
- Her employer may have instead obtained its own Ethernet transport facility to connect the branch office where she sits to the rest of the CenturyLink-provided VPN.
- Her employer may have purchased enterprise data networking services from AT&T (or any other common carrier or non-common carrier business data service provider), even though it uses CenturyLink for voice service, and her branch may be connected to that enterprise network via a CenturyLink Internet connection resold by AT&T to the enterprise.
- She may be teleworking from her home, connecting via a VPN over a CenturyLink residential Internet connection.
- She may be teleworking but using an Internet connection from the local cable incumbent.
- Or she may be working remotely from a coffeehouse, connecting to its WiFi access point, connected to a CenturyLink Internet connection, which itself may be a resold Internet connection from another local provider, such as a cable provider.

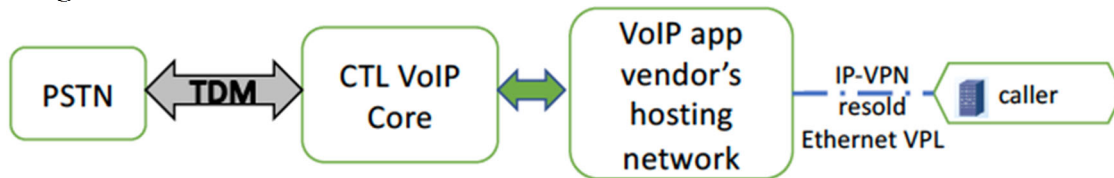
Under AT&T's reading of the VoIP Symmetry Rule, it is not clear when the VoIP provider and its LEC partner might be able to assess end office local access switching charges in each of these—and any number of other—scenarios. And this is a problem for every LEC that offers this kind of VoIP-enabling service to its customers, including AT&T. For instance, everyone seems to agree that a LEC can assess end office switching charges for a call in which the LEC has provided the connectivity to the PSTN, the VoIP service, and an IP-VPN over an MPLS connection to the caller's premises (Figure 1).

**Figure 1:**



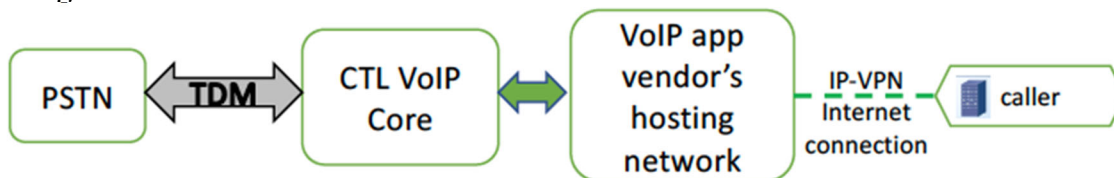
But what if the VoIP product—say, Skype for Business, offered by the LEC through an IP-VPN—is accessed over off-net facilities, such as an Ethernet Virtual Private Line (VPL), resold by the LEC (Figure 2)?

**Figure 2:**



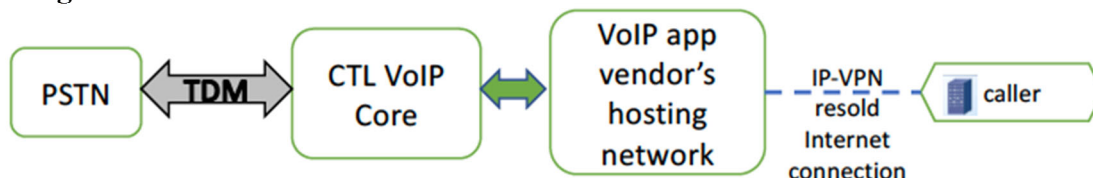
If the caller is connected by means of an Internet connection provided by the LEC, does that change whether the traffic is compensable (Figure 3)? And if so, why?

**Figure 3:**



What if the Internet connection is provided by the LEC, but the LEC provisions that Internet connection from the local cable incumbent (Figure 4)?

**Figure 4:**



Are these four scenarios meaningfully different? AT&T has not yet articulated a rational justification for why they should be. And if these four cannot be distinguished, how can we further distinguish the scenario in which the enterprise customer's employee accesses her Skype for Business account from home, and the LEC is her broadband provider (Figure 5)? Or where a third party provides her broadband connection but her connection to the PSTN is nevertheless provided by the LEC (Figure 6)?

**Figure 5:**



**Figure 6:**



In each of the above (and many other) scenarios, the employee's calls travel over a combination of dedicated and non-dedicated facilities, regardless of whether the employee connects via IP-VPN or the Internet, and those connections might involve networks owned by different providers. Indeed, in modern enterprise network offerings, including AT&T's offerings, enterprise customers are permitted to connect their branches using "bring your own" bandwidth—including bandwidth delivered via an Internet connection. Under AT&T's test, it is simply not clear whether access charges would be available for VoIP service offered over a resold Ethernet VPL, resold Internet connection, or a self-deployed connection (whether an Internet connection or otherwise)—or what non-arbitrary basis there would be for distinguishing among these and other arrangements to permit access charges in some but not others.

The plain fact is that the LEC depicted in these scenarios delivering VoIP calls to or from the PSTN performs the functional equivalent of end office switching *regardless of the facilities over which those calls travel*. In adopting the VoIP Symmetry Rule, the Commission was very clear that it was "adopt[ing] rules that permit a LEC to charge the relevant intercarrier compensation for functions performed by it and/or by its retail VoIP partner, *regardless of whether the functions performed or the technology used correspond precisely to those used under a traditional TDM architecture*."<sup>5</sup>

This is critical, because the calls for which LECs and their VoIP partners are assessing end office access switching charges in these scenarios are the same kind of calls that LECs have always charged for—all that has changed is the technology. For instance, instead of routing calls to and from a customer's PBX by means of a TDM PRI, LECs are routing calls to and from a VoIP application server that provides similar functionality for the customer. The transition from a PBX to a VoIP application server does not change anything about the functions being performed by the LEC in routing calls to and from the PBX or VoIP server from and to the PSTN. And the various means by which an enterprise's branch locations might connect to a centralized PBX—or today the VoIP application server—has never had any bearing on whether the LEC could or would assess end office access charges.

Conveniently, AT&T charges end office access switching charges for *all* of its call flows, regardless of whether they involve any over-the-top transmission. To be clear, AT&T surely has, and charges end office access charges for, traffic that has been transmitted at least in part

---

<sup>5</sup> *Connect America Fund et al.*, Report and Order and Further Notice of Proposed Rulemaking, 26 FCC Rcd. 17,663 ¶ 970 (2011) ("*Transformation Order*") (emphasis added).

“over-the-top”—AT&T’s services enable just such functionality. AT&T touts that fact on its website, and that functionality is popular with customers.<sup>6</sup>

Nevertheless, AT&T claims that its conduct does not violate its interpretation of the VoIP Symmetry Rule. AT&T has claimed in litigation that, because it is “not aware of any partnerships [it may have] with any retail provider of OTT-VoIP calling services,” it neither originates nor terminates OTT-VoIP calls and therefore is entitled to bill access charges on all its calls.<sup>7</sup>

AT&T’s statement suggests that AT&T believes that whether the enterprise customer using these services is the LEC’s direct customer rather than the customer of the LEC’s wholesale partner is relevant to whether the LEC can charge switching charges. AT&T has never explained why that would be so, or even explained which call flows involving wholesale arrangements—and for every enterprise call flow discussed above, there is a corresponding wholesale version—would permit a LEC to collect end office switching charges. Of course, any attempt to draw such a distinction would be arbitrary and without basis in law.

Indeed, just like the enterprise call flows discussed above, these wholesale arrangements involve the same types of arrangements for which LECs have always been permitted to charge end office switching access compensation. For example, a customer could use the same sort of PRI connection from an incumbent LEC that an enterprise might use to support an old-fashioned PBX to instead support an “over-the-top” VoIP service that it sells to its own customers.<sup>8</sup> In fact, CenturyLink as an incumbent LEC has had PRI customers that provided such “over-the-top” VoIP services for their own customers, and CenturyLink charged end office access charges pursuant to its incumbent LEC tariff for call flows that included an “over the top” component.<sup>9</sup>

---

<sup>6</sup> See *supra* n.2.

<sup>7</sup> AT&T has asserted that “AT&T is not aware of any partnerships it has with retail providers of OTT-VoIP calling services, and, as a consequence, AT&T in its capacity as a LEC neither originates OTT-VoIP calls that are exchanged in TDM format nor terminates OTT-VoIP calls that are exchanged in TDM format. When AT&T, acting in its capacity as a LEC, bills access services, AT&T therefore does not need to use methods to identify percentage of traffic that is OTT-VoIP traffic.” Exhibit C to Level 3 Communications, LLC’s Motion for Leave to Amend its Counterclaims at 5, *AT&T Corp. v. Level 3 Communications, LLC*, No. 18-cv-00112-RM-MEH (D. Colo. Sept. 24, 2018).

<sup>8</sup> In such an arrangement, the VoIP provider would need to perform the SIP-TDM conversion itself. Although VoIP providers do not today typically purchase services like these from incumbent LECs, there is no particular technological reason they could not.

<sup>9</sup> Under section 2.6 of the CenturyLink incumbent LEC tariff, see CenturyLink Operating Companies, Tariff F.C.C. No 11 at § 2.6, 2–87, as well as under AT&T’s tariffs, see, e.g., BellSouth Telecommunications, Tariff F.C.C. No. 1 at § 2.6, 2–174; Southwestern Bell Telephone Company, Tariff F.C.C. No. 73 at § 2.7, 2–103, the wholesale customer would qualify as an “end user” and thus calls delivered to (or picked up from) that entity would be subject to end office access charges just like any other end user. (Each of the cited tariffs has the same definition for “end user”: “any customer of an interstate or foreign

Moreover, any attempt by AT&T to draw a distinction between direct sales to enterprises and wholesale arrangements would run into another significant obstacle: the VoIP Symmetry Rule itself. The VoIP Symmetry Rule provides that a LEC is permitted to charge access reciprocal compensation charges not just for functions it performs itself, but also for functions performed by its VoIP partner.<sup>10</sup> In other words, the rule provides that the LEC and its VoIP partner are treated as a single entity for the purposes of determining which charges are applicable. That, of course, means that when a LEC sells a service on a wholesale basis to a VoIP partner that then sells a service to an enterprise, the combined “LEC-VoIP partner” pair—the relevant entity as far as the rule is concerned—is not selling a wholesale service at all, but is selling a retail service.<sup>11</sup>

AT&T has studiously avoided discussing any of these issues. Nevertheless, AT&T insists that a LEC cannot charge end office access charges in at least one particular call flow—when a LEC partners with a VoIP provider, and a caller, who has purchased service from the VoIP provider (but not directly from the LEC) uses her Internet connection (which she has purchased from a company other than the LEC) to connect to the VoIP provider’s application server. Such an arrangement is depicted below:



This, of course, is the same as Figure 6 above, with one wrinkle. Instead of CenturyLink providing service to the enterprise directly, in this version, CenturyLink provides service to the VoIP provider partner. To be sure, AT&T might prefer a rule that LECs cannot assess access charges on such calls. But, as explained above, AT&T has never actually provided a legal basis for distinguishing “over-the-top” arrangements such as these for which AT&T believes LECs may *not* assess end office charges from “over-the-top” arrangements (like the actual Figure 6) for which it believes they may. Again: AT&T does not deny that it charges end office access charges in arrangements like Figure 6 above, but it argues that end office charges may not be

---

telecommunications services that is not a carrier, except that a carrier other than a telephone company shall be deemed to be an ‘end user’ when such carrier uses a telecommunications service for administrative purposes and a person or entity that offers telecommunications service exclusively as a reseller shall be deemed to be an ‘end user’ if all resale transmissions offered by such reseller originate on the premises of such reseller.”)

<sup>10</sup> See 47 C.F.R. § 51.913(b).

<sup>11</sup> Notably, this too is consistent with how such arrangements would have been treated in the old-fashioned TDM world. In a TDM arrangement, the wholesale partner, assuming it did not qualify as an “end user” as discussed above, would have been a carrier that itself would have imposed end office access charges. The combined partnership would have, accordingly, applied the exact same sets of charges that LECs and their VoIP partners charge today under the VoIP Symmetry Rule. This, of course, was a key purpose of the VoIP Symmetry Rule, which did not require VoIP providers to be carriers.

imposed in the wholesale version of the same arrangement. AT&T has not provided a legal basis for such a distinction because, for all the reasons set forth above as well as those in CenturyLink's petition and its reply comments, it cannot.

While AT&T has avoided addressing any of these problems with its reading of the VoIP Symmetry Rule, the Commission has no such luxury. If the Commission decides to embrace AT&T's approach, it will have to explain when access charges are available and when they are not, and provide a reasoned basis for any distinctions it might draw.

Sincerely,



John T. Nakahata  
Kristine Laudadio Devine  
HARRIS, WILTSHIRE & GRANNIS LLP  
1919 M Street, NW  
The Eighth Floor  
Washington, DC 20036  
(202) 730-1300  
[jnakahata@hwglaw.com](mailto:jnakahata@hwglaw.com)

CENTURYLINK  
Timothy M. Boucher  
Suite 120  
931 14<sup>th</sup> Street  
Denver, CO 80202  
303-992-5751  
[Timothy.Boucher@CenturyLink.com](mailto:Timothy.Boucher@CenturyLink.com)

Joseph C. Cavender  
Suite 250  
1099 New York Avenue, N.W.  
Washington, D.C. 20001  
571-730-6533  
[Joseph.Cavender@CenturyLink.com](mailto:Joseph.Cavender@CenturyLink.com)

cc: Pam Arluk  
Victoria Goldberg  
Lisa Hone  
Rhonda Lien